

## ABSTRACT

A system and method for calibrating a sensor. The method may include, without limitation, compiling an array of data relating to the sensor; adjusting a sensor parameter a first time based on data in the array; adjusting a curve representing the sensor output based on data in the array; and adjusting the sensor parameter a second time based on data in the array. The sensor may be an *in vivo* glucose sensor and the sensor parameter adjusted may be a current. The array may include historical as well as recent data, such as, for example, blood glucose readings and sensor electrode readings.